Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois / 62764

BDE PROCEDURE MEMORANDUM

NUMBER: 41-05

SUBJECT: Delegation of Approval Authorities to Districts

DATE: June 1, 2005

This memorandum supersedes and replaces BDE Procedure Memorandum 41-04, dated June 30, 2004. This memorandum is being issued to transmit changes in the original memorandum necessitated by compliance with ISO 9001 and the Division of Highways reorganization. Revision marks have been placed in the margin showing the changes made in the document.

This memorandum modifies information in Chapters 2, 3, 11, 12, 14, 15, 23, 24, 26, 36, 37, 39, 53, and 54 of the *BDE Manual*. The changes presented below will be incorporated in a future update of the *BDE Manual*.

BACKGROUND

The policy and procedure changes discussed in this memorandum implement a Division of Highways initiative for delegating more approval authority to the District Offices. This delegation of authority supports the goal of giving Districts primary accountability for meeting project scope, schedule, and budget objectives while also ensuring that project approval decisions are consistent with established highway safety standards and environmental analysis requirements.

Qualifications have been developed such that Districts can pursue approval authority for specific positions if staffing permits. The Deputy Director/Regional Engineer will be responsible for determining staff capabilities, seeking District approval authority, and requesting assistance from Headquarters should the District staff experience be insufficient for the required work. As an ultimate goal, within two years, Districts would fill positions with able and experienced staff. With budget constraints and staff turnover, it is understood that this process will be an evolving one, where responsibilities will shift periodically between the District Offices and Headquarters. Process reviews and District coordination meetings will ensure proper and consistent application of policy and quality compliance.

APPLICABILITY

The procedures in this memorandum are applicable to project approval decisions after June 30, 2004.

PROCEDURES

Phase I Design Approval Process

For the Phase I design approval process, changes are being implemented to delegate more approval authority to District Offices in four areas: Design Approval of Phase I Engineering Reports, Design Exceptions, Geometric Approval, and Pavement Design Approval. Attachment 1 provides an overview of the changes and the following sections discuss each in more detail.

Design Approval of Phase I Reports

Effective with the issuance of this memorandum, Districts are no longer required to submit Phase I Engineering Reports to BDE for review or approval except for those involving a major new alignment addressed by Corridor Reports, Feasibility Study Reports, and Design Reports. Projects will require FHWA review and approval in accordance with the Project Oversight Agreement between IDOT and FHWA. Districts shall submit Phase I Engineering Reports for such projects directly to FHWA for review and approval. FHWA will provide comments and/or approval directly to the Districts. Districts shall be responsible for addressing any comments provided by FHWA. Procedures in the *BDE Manual* will remain in effect with the proviso that language in those sections which require submittal of Phase I Engineering Reports to BDE for review and approval may be ignored, except as noted above. Changes in the design approval procedures give the Districts primary accountability for ensuring that projects conform to the requirements in the *BDE Manual*.

All projects except for SMART and 3P projects without design exceptions shall be discussed at the District coordination meetings. Representatives from BDE and FHWA will attend the coordination meetings and provide input with regard to the adequacy and consistency of policy interpretation as well as design analyses and other information as warranted. Discussion of design aspects at coordination meetings will provide the opportunity for Districts to address issues and concerns, and to seek guidance from BDE and FHWA. Districts will be responsible for ensuring that Phase I Engineering Reports appropriately reflect provided input. Coordination with the Bureau of Bridges and Structures will still be required for structures impacted by projects to ensure adequate loading capacity.

Responsibilities of the Headquarter's Detour Committee will be assumed by each District. District Detour Committees shall be comprised of a standing team of representatives from the District Bureaus of Program Development, Project Implementation, Local Roads, and Operations. Detours adjacent to or encompassing routes in another District shall be coordinated with the affected District Detour Committee. Traffic Management Analysis (TMA) plans shall be approved by the District Detour Committee.

Design Exceptions

The design process is driven by the establishment of fundamental design controls. There are occasions when the application of full design criteria may produce an unacceptable or infeasible solution. Judicious application of design exceptions is appropriate when necessary, especially in a context sensitive design environment, as long as safety and legal risks are understood by the designer, are considered acceptable given site-specific conditions, and are well documented. The importance of documentation supporting decisions for design exceptions is critical for legal purposes.

A recent FHWA/IDOT joint process review determined that IDOT has a formal and well-documented process for design exceptions. The design exception process does vary somewhat from District to District. The review team recommended a more uniform process throughout the state. With the implementation of Context Sensitive Solutions (CSS), this is even more critical. Because of the need for statewide consistency of the design process, BDE will continue to be involved in the design exception approval process.

Most design exceptions have historically been presented at the District coordination meetings. BDE concurrence has been granted at the coordination meetings when adequate justification has been provided. This allows for timely inclusion of the design exception into the design process. This method shall continue. In addition, all design exceptions shall require the use of a design exception request and approval form, with attachments if needed. Design exceptions for policy resurfacing thickness shall require a more formal request to BDE through a memorandum with proper documentation as detailed in Chapter 53 of the *BDE Manual*. Design exceptions not approved by BDE at or subsequent to coordination meetings will be forwarded by BDE to the Director of Highways/Chief Engineer and Deputy Director/Assistant Chief Engineer for a final decision. Design exceptions presented to the Director will be submitted electronically documenting the requested design exception, the District's justification for the exception, and BDE comments. The Director will discuss the design exception with the Deputy Director/Regional Engineer before a final decision is made.

Design exceptions on projects with full FHWA oversight, require FHWA approval. Districts shall present the design exception and justification at the District coordination meeting and submit a formal request to FHWA in accordance with the Project Oversight Agreement between IDOT and FHWA. FHWA will provide a formal response to the District.

Design exceptions shall be clearly justified and documented. The justification shall include a combination of accident analysis, cost comparisons, magnitude of impacts, capacity analysis and other relevant information as to the rationale and basis for the design exception. (Safety cannot be comprised through the design exception process to meet "Scope/Schedule/Budget".) A benefit/cost ratio may be included if deemed relevant to the decision making process. As

further documentation for design exceptions, the Design Criteria Checklist in the Appendix of Chapter 31 of the *BDE Manual* shall be completed for all construction, reconstruction, and 3R projects. The Checklist shall be included in the Phase I Engineering Report and also included as part of the project file. In addition, BDE will develop a database where all design exceptions will be documented. This will assist with the consistency of application of design exceptions and expedite the approval process further.

Geometric Approval

Geometric designs such as Intersection Design Studies and Interchange Design Studies represent some of the most critical parts of Phase I Engineering Reports with respect to the safety and operational quality of the highway facilities. These designs are some of the most complex and technically rigorous portions of the preliminary engineering process. Proficiency in geometric design takes years of experience, training and hands-on work to achieve. Great care must be taken in choosing those individuals responsible for the development and approval of such designs, and the end products must be closely monitored for quality compliance.

Henceforth, Districts are eligible to become qualified to approve all geometric designs they produce. Attachment 3 contains requirements prerequisite to consideration for qualification. A Licensed Professional Engineer in the position of Geometrics Engineer is required. Once qualified, Districts can approve all geometric designs they produce. However, design exceptions included in any geometric design must be approved through Headquarters as outlined in the preceding section of this memorandum.

The geometric designs of Districts not qualified for geometric approval will continue to be reviewed and approved by BDE, as has been done historically. This is true for Districts where the Deputy Director/Regional Engineer has not requested anyone to be qualified, as well as for those Districts for which qualification has been rescinded. Although BDE review and approval are not required, qualified Districts may request BDE assistance in the processing of any geometric design.

Access Justification Reports (AJR's) and access control changes on Interstates will continue to be coordinated by Headquarters. This is due to the complex nature of the designs and issues involved, and the need for statewide consistency. BDE will review the documents, and the Director of Highways/Chief Engineer, the Deputy Director/Assistant Chief Engineer and the Deputy Director/Regional Engineer will jointly approve the documents for transmittal to FHWA for final Federal approval.

Pavement Design Approval

Because of the sensitive and competitive nature of the pavement design and selection process, BDE will maintain responsibility for this process. However, to reduce a portion of the workload both within the District offices and

Headquarters, the quantity threshold has been raised. Pavement design submittals to BDE are required for designs involving more than 10,000 yd², high stress intersections, experimental pavements, or any special designs or design exception requests. Design exceptions and special designs will be forwarded to the Director of Highways/Chief Engineer for final approval. Informational copies of the approved design shall be submitted to BDE for designs involving more than 4750 yd².

The selection of the pavement design alternatives will continue to be based on the criteria established in Chapter 54 of the *BDE Manual*. Pavement designs with a life cycle cost difference of 10% or less will be submitted to the Pavement Selection Committee. The Pavement Selection Committee will select a pavement type and forward this recommendation to the Director of Highways/Chief Engineer for final approval.

Approved pavement designs shall be included in the Phase I Engineering Report.

Environmental Approval Process

For the environmental approval process, changes are being made to delegate more authority to District Offices for Environmental Assessments (EAs), Findings of No Significant Impact (FONSIs), Environmental Class of Action Determination (ECAD) documentation, Section 4(f) Evaluations (other than combined Section 106/4(f) documents), and Group II Categorical Exclusions (CEs). Attachment 2 provides an overview of the changes and the sections below provide additional details.

NOTE: The changes being implemented at this time do not affect the procedures currently in place for Environmental Impact Statements (Chapter 25), Special Environmental Studies other than Section 4(f) Evaluations (Chapter 26), the Integrated Survey Process (Chapter 27), and the Special Waste Procedures (Chapter 27).

Changes Affecting Environmental Assessments, ECAD Documentation, and Section 4(f) Evaluations

Effective with the issuance of this memorandum, if District environmental staff is qualified as detailed in Attachment 4, then Districts are no longer required to submit EAs, FONSIs, ECAD documentation (Class of Action Determination Records and Class of Action Determination Documents), and Section 4(f) Evaluations other than combined Section 106/4(f) documents, to BDE for review or approval. The procedures in Section 23-2, Chapter 24, and Section 26-2 of the *BDE Manual* will remain in effect with the proviso that language in those parts requiring submittal of the aforementioned documents to BDE for review or approval may be ignored. (Districts will still need to submit combined Section 106/4(f) documents to BDE for review and coordination pursuant to the Historic Act compliance requirements).

This change in procedures gives the Districts primary accountability for ensuring that their EAs, FONSIs, ECAD documents, and Section 4(f) evaluations conform with the requirements in Part III of the *BDE Manual* and applicable BDE Procedure Memorandums, prior to submitting the documents to FHWA for review and approval.

Changes Affecting Group II CEs

Effective with the issuance of this memorandum, if District environmental staff is qualified as detailed in Attachment 4, then BDE review of the environmental documentation in Phase I Engineering Reports is no longer required prior to design approval. Districts will be accountable for ensuring that the documentation conforms to the requirements discussed in Chapter 12 and Section 23-4 of the *BDE Manual*. In addition, BDE concurrence in Group II CEs will no longer be required. BDE representatives will still participate in District coordination meetings to offer assistance and guidance on environmental issues for CE projects, as appropriate, but their concurrence in Group II CEs will not be necessary. For projects that will involve Federal funding or approvals, FHWA concurrence in Group II CEs will still be required.

Staff Qualifications/Training

With this memorandum, BDE is providing required qualifications for Geometric Engineers and environmental staff (Attachments 3 and 4). Districts shall consider these qualifications in assessing their staffing capabilities and needs for effectively carrying out the accountabilities under these revised procedures.

If the Deputy Director/Regional Engineer deems District staff to be professionally capable of producing acceptable geometric designs and wishes that staff to approve those documents without BDE review, s/he submits recommendations for qualified individuals or groups to the Bureau Chief of BDE. BDE staff will then verify and evaluate the prerequisite qualifications of any recommended individuals. Upon completion of this review, BDE will forward provisional qualifications to the Director of Highways/Chief Engineer, with any pertinent comments as to required qualifications, or lack thereof. The Director can either approve or deny qualification, or confer provisional qualification. The Director will send the results to the Deputy Director/Regional Engineer, with a copy to BDE.

District staffing changes will affect the qualification status for individuals or groups exercising geometric or environmental approval authority. Deputy Directors/Regional Engineers must submit any such changes to the Bureau Chief of BDE. BDE staff will then evaluate the impacts of the changes. Upon completion of this review, BDE will forward the submission to the Director of Highways/Chief Engineer with any pertinent comments on the effect of the changes. The Director will then determine qualification status. The Director will send the results to the Deputy Director/Regional Engineer, with a copy to BDE.

Requesting BDE Assistance

Districts will still have the option of requesting BDE review or other assistance in the preparation of the documents detailed in this procedure memorandum on an as-needed basis. For BDE's internal quality control tracking purposes, such requests must be submitted in the form of a memorandum from the Deputy Director/Regional Engineer to the Bureau Chief of BDE. The memorandum will need to describe the assistance being requested and the desired time frame for receipt of the response from BDE. BDE staff will be subject to an internal quality control/quality assurance process that will monitor the assistance requests and responses to ensure quality and timeliness of the responses BDE provides and to identify and implement improvement measures as needed. If there are questions about whether BDE will be able to provide the requested assistance and/or meet the requested time frame, BDE will confer with the District as necessary to address those concerns. If the concerns cannot be satisfactorily resolved, BDE may notify the District that it will be unable to fulfill the assistance request, in which case, it may provide recommendations on other options for obtaining the needed assistance.

Process Reviews

Districts must submit informational copies of all approved documents (Phase I Engineering Reports, geometric designs, and environmental documentation) to BDE upon final approval. BDE will conduct a process review of the first document of each type in each District prepared under the procedures in this memorandum. Annual process reviews of Phase I Engineering Reports will include Group II CE concurrence aspects as a part of these reviews. BDE will provide written findings, guidance, training, revised procedures, or specific recommendations for District action, as appropriate, for addressing any identified deficiencies or concerns. The Deputy Director/Regional Engineer will be required to provide a written reply to the Bureau Chief of BDE indicating corrective actions the District will take in response to the recommendations provided. Thereafter, BDE will conduct annual process reviews of the approved documents to ensure quality compliance. In addition, when approved by the Director, BDE is not precluded from reviewing any portion of the Phase I process at any time, especially when unique features or unusual circumstances are involved.

The projects selected for the process review will depend upon which types of documents, and how many of each has been approved in which Districts in that year. For each annual process review, BDE will provide written findings, guidance, training, revised procedures, or specific recommendations for District action, as appropriate, for addressing any identified deficiencies or concerns. Copies of the process review reports will be submitted to the Director of Highways/Chief Engineer and the Secretary of Transportation. The Deputy Director/Regional Engineer shall provide a written reply to the Bureau Chief of BDE indicating corrective actions the District will take in response to the recommendations provided.

If a process review determines that a District's geometric designs are unsatisfactory, the Deputy Director/Regional Engineer and the Director of Highways/Chief Engineer will be notified immediately of the deficiencies. Further, BDE will randomly review the District's designs for the next year. If further shortcomings arise, the District's geometric qualification may be rescinded by the Director of Highways/Chief Engineer.

FHWA will participate in all process reviews conducted pursuant to these procedures and recommend corrective actions when needed. Best practices identified through the BDE process review will be shared with all Districts.

Engineer of Design and Environment Michael L. Hine

Attachments

Phase I Review and Approval Process (for State Highway Projects)

In table below, **bold type** denotes process changes effective June 30, 2004.

Phase I approval process component	*Process in effect through June 30, 2004*	*Process in effect after June 30, 2004*	*Explanation*
Design Approval of Phase I Reports	BDE is involved for Corridor, Feasibility Study, Design, Combined Design, State Improvement, Project, 3P and SMART Reports. Corridor, Feasibility Studies, Design Reports require concurrence of the Director of Highways/Chief Engineer, and a briefing of the Secretary and Director of OP&P prior to approval. District Engineer Approval authority includes (50% of all projects): •3R projects EXCEPT: – safety projects, – projects on Interstate routes and other access controlled highways – projects involving conversion of medians or through lanes to 2W2L – projects requiring change to # of through travel lanes •New Right of Way (3acres per mile or more) •Intersection improvements approved by a Certified Geometric Engineer •3P and SMART reports Detour Committee (Central BDE, Construction, Local Roads, & Operations) reviews and approves Detour Reports and TMAs. All projects are discussed at coordination meetings.	• **Delegate review and approval of all projects to District except those involving major new alignment addressed by Corridor, Feasibility Study, & Design Reports or where the Deputy Director/Regional Engineer (DD/RE) has requested BDE assistance.** • **Delegate Detour Committee responsibility, including TMA approval, to District, requiring multiple bureau participation.** • Corridor, Feasibility Studies, Design Reports will continue to be reviewed and approved by BDE and require concurrence of the Director of Highways/Chief Engineer, and a briefing of the Secretary and Director of OP&P prior to approval. • District will continue to submit informational copies of all approved project reports to BDE. • **All projects except SMART & 3P (unless there are design exceptions OR project is a CE II) will be discussed at coordination meetings.** • **Districts will continue to coordinate with the Bridge Office when structures are impacted by a project.** • **BDE and FHWA conduct annual process reviews.**	The discussion of design aspects at coordination meetings will afford the opportunity for BDE to provide feedback on the adequacy of policy interpretation and design analyses. The district will be responsible for ensuring that the phase I report appropriately reflects the input provided. Where the DD/RE does not feel comfortable with the experience level within the district, the DD/RE may request BDE assistance. Annual process reviews will insure quality compliance and corrective action as needed. Coordination with the Bridge Office for structures impacted by projects still needs to be required to insure adequate loading capacity, etc. Continued BDE involvement for projects involving major new alignment addressed by Corridor Reports, Feasibility Study Reports, & Design Reports is recommended due to complexity of issues and the greater potential for legal challenge on these types of actions. The District Detour Committee shall consist of members from the District Bureaus of Program Development, Project Implementation, Local Roads, and Operations. Multi-district detours will be coordinated between district committees. TMAs can be discussed by this group too. This option gives District more accountability.

Phase I approval process component	*Process in effect through June 30, 2004*	*Process in effect after June 30, 2004*	*Explanation*
Design Exceptions	BDE approves specific design exceptions as noted by the Oversight Agreement, mostly at coordination meetings. FHWA approves specific design exceptions as noted by the Oversight Agreement. Formal submittal by the district is required at coordination meetings. Common design exceptions: • Lane & Shoulder Width • Level of Service • Resurfacing thickness • V.C. length, sight distance • Median width & type • Design vehicle, radius returns, intersection approach grades, auxiliary lane channelization lengths • Guardrail length, earth slopes • 3P& SMART-Extra work	• BDE will continue to maintain this responsibility. Design exceptions will continue to be discussed at coordination meetings. **Design exceptions shall require the use of a design exception request and approval form, with attachments. The Director/Chief Engineer, Deputy Director/Assistant Chief Engineer and the DD/RE will further discuss design exceptions not approved by BDE.** • FHWA will continue to maintain approval authority of design exceptions as noted in the Oversight Agreement. • **Require BDE Design Criteria Checklist in all Phase I Reports and project files.** • **Central database for approved design exceptions**.	Continued BDE involvement is recommended to insure statewide consistency of the design exception process, especially with the implementation of CSS, to minimize liability to the department. Design Criteria Checklist will be required based on the recent FHWA process review. The Central database will allow for tracking of proper justification of design exceptions and may expedite the approval process further.
Geometric Approval	Certified Geometric Engineers approve policy-compliant geometric designs where: •left turn lanes in existing medians except those which are channelized •Right turn lanes constructed in conjunction with federal and state funded 3R projects where no additional ROW is required •Radius returns on all 3R projects where no additional ROW is required. •All geometric improvements on state-only 3R projects on unmarked routes within existing ROW except those with channelized left turn lanes	• **Delegate all geometric designs for:** ➢ **District Geometric Approval if:** – **Approved by Director of Highways/Chief Engineer as Qualified Licensed Professional Engineer/Geometrics Engineer** – **District has qualified staff within the Geometrics Unit—PD Engineer or DD/RE must review, approve, and sign)** **(See Attachment 3 for Criteria)** • BDE handles geometric approval by non-qualified Geometrics Engineers/Districts. • BDE continue to review and approve: – Access Control Modification – Access Justification Reports • Districts submit informational copies of all approved IDSs to BDE. • **BDE and FHWA conduct annual process reviews.**	Approved qualified Geometrics Engineers/Districts approve all geometric designs. Design exceptions to be incorporated into geometric designs will continue to be approved by BDE. This option gives the district more accountability. Because of the difficult technical nature of geometric designs, continued BDE involvement is recommended for those districts without qualified Geometric Engineers. Continued BDE involvement is recommended for Access Control Modification and Access Justification Reports due to the complexity and nuance of the design and issues involved and the need for statewide consistency. Access Control Modification and Access Justification Reports generally do not impact scope, schedule or budget. The Deputy Director/Regional Engineer, the Director, and the Deputy Director/Assistant Chief Engineer have joint responsibility of approval.

Phase I approval process component	*Process in effect through June 30, 2004*	*Process in effect after June 30, 2004*	*Explanation*
Pavement Design Approval	BDE is involved in review and approval of: • Designs >4750 yd² • Special Designs • Waivers	• **Approved Pavement Designs will be required for Design Approval of Phase I reports.** • **Pavement Designs ≥ 10,000 yd², all High Stress Intersection designs, experimental pavements, and any special designs will be reviewed and approved by BDE. Informational copies of district approved designs will be submitted to BDE.** • **BDE will forward pavement design exceptions, special designs, and recommended pavement type determined from the pavement designs submitted to the Pavement Selection Committee to the Director of Highways/Chief Engineer and Deputy Director/Assistant Chief Engineer for final approval.**	The design and selection of pavements touches on very competitive and sensitive interests. Continued involvement of BDE minimizes errors, reduces the potential for perceived bias, and helps to assure uniform and correct statewide application of design procedures. Most districts do not have one person designated as responsible for pavement design. BDE serves as a resource to the districts during development of pavement designs. This helps to streamline the subsequent BDE review and approval process.

Environmental Approval Process

In table below, **bold type** denotes process changes effective June 30, 2004.

Environmental approval process component	*Process in effect through June 30, 2004*	*Process in effect after June 30, 2004*	*Explanation*
EIS	BDE is involved in preparation, review, and approval of all EISs.	• No change in current procedures.	BDE involvement will continue due to complexity of issues and the greater potential for legal challenge on these types of actions.
EA/FONSI/ECAD	BDE is involved in preparation, review, and approval of all EAs, FONSIs, and ECADs.	• **BDE review and approval of EAs/FONSIs/ECAD documents is no longer required with approved qualified District Environment staff.** • BDE will receive informational copy of all final approved EA/FONSI/ECAD documents. • **BDE will implement process review of first approved EA/FONSI/ECAD prepared under new process and will provide guidance and recommendations to address any deficiencies. FHWA will participate in process review. BDE and FHWA will conduct annual process reviews thereafter.** • **District can still request BDE assistance case-by-case, as needed.** • **BDE has developed general required qualifications for district environmental staff.**	This option gives District more accountability while providing process review for evaluation of quality and corrective action, as needed.
Environmental information in Phase I Engineering Reports/Group II CE Concurrence	Reviewed by BDE PD&I. BDE Environment Section does not currently review environmental content in Phase I Engineering Reports but is involved in Group II CE concurrence, generally at coordination meetings.	• **BDE review of environmental information in Phase I reports prior to design approval is no longer required, if qualified staff exists.** • **BDE concurrence on Group II CEs is no longer required.** FHWA concurrence is still required on Federal Group II jobs. • BDE will receive informational copy of all final approved Phase I engineering reports. • **BDE and FHWA will conduct annual process review on Group II CEs.**	This option eliminates need for BDE concurrence in Group II call while providing process review to evaluate operation of process and provide for implementing corrective action, as needed.
Section 4(f) documentation	BDE is involved in review of all 4(f)s as a part of environmental documentation (EIS/EA) and also reviews separate 4(f)s for ECADs and Group II CE projects.	• **With qualified environmental staff, BDE review of 4(f) documentation for EA/ECAD/Group II CE projects is no longer required, except for combined 106/4(f) documents.** • BDE will receive informational copy of all final approved 4(f) documents. • BDE will still review 4(f) documentation for EIS projects and combined 106/4(f) documents.	Since 4(f) documentation generally is integrated with the NEPA documentation, it would still be subject to BDE review for EIS actions but not for EA/ECAD/Group II CEs. The exception would be for combined 106/4(f) documents. The process reviews for EA/ECAD/Group II CE quality assurance also should cover 4(f) documentation for those projects.

Environmental approval process component	*Process in effect through June 30, 2004*	*Process in effect after June 30, 2004*	*Explanation*
Special Environmental Studies (Chapter 26 of *BDE Manual*), Integrated Survey Process (Chapter 27 of *BDE Manual*) and Special Waste Procedures (Chapter 27 of *BDE Manual*)	BDE is involved in the processes for each of these environmental approval components.	No change in current procedures except for Section 4(f) Evaluations (see above).	BDE will continue to provide centralized review and support (e.g., specialized expertise and statewide contract management) for each of these areas, as provided in Chapters 26 and 27 of the *BDE Manual*.

REQUIRED QUALIFICATIONS FOR DISTRICT GEOMETRICS ENGINEER

Requirements:

1. Candidate must have a degree in Civil Engineering, and possess a Civil Engineer V technical classification with the Department, State of Illinois Professional Engineer License implied.

2. Candidate must have demonstrated the professional ability to produce designs that reflect genuine expertise in the field of geometrics as recognized by the Deputy Director/Regional Engineer.

3. Candidate must participate in a one-day orientation in the Bureau of Design & Environment.

4. Candidate must have attended IDOT-approved capacity and geometrics training classes.
    a. Highway Capacity
    b. Fundamentals of Geometrics
    c. Advanced Geometrics

5. The Deputy Director/Regional Engineer must recommend candidate(s) to the Director of Highways/Chief Engineer through the Bureau Chief of BDE for approval. The Director will then approve or deny the recommendation.

Recognition:

The District Geometrics Engineer is qualified to approve all geometric designs.

Approval authority of the Geometrics Engineer can be withdrawn by the Director of Highways/Chief Engineer in the event of failure to exhibit the requisite professional ability. Removal of approval authority would be based on unsatisfactory results of process reviews.

Responsibilities:

Qualified District Geometrics Engineers can approve all geometric designs.

Restrictions:

The approval of Access Justification Reports and changes in access control will be a joint responsibility of the Deputy Director/Regional Engineer, the Director of Highways/Chief Engineer and the Deputy Director/Assistant Chief Engineer before passing along to FHWA for federal approval, if necessary.

In the circumstance where a District has a person or persons in its Geometrics Unit with the cumulative experience and demonstrated ability to produce satisfactory designs but without any person having the ability to become a Geometrics Engineer, the Director of Highways/Chief Engineer will consider approving the Geometrics Unit as qualified at the request of the Deputy Director/Regional Engineer. If the unit is approved as having qualified staff, the District Program Development Engineer or Deputy Director/Regional Engineer will be responsible for the review, approval, and signing of geometric designs. Staffing changes within the Geometrics Unit may nullify the District's approval authority. To continue to maintain approval authority, the Deputy Director/Regional Engineer shall submit staffing changes within the Geometrics Unit including qualifications to the Director of Highways/Chief Engineer through the Chief of BDE for approval.

The Bureau of Design & Environment will review and comment upon geometric designs eligible for District Geometrics Engineer approval, if the District so requests.

REQUIRED QUALIFICATIONS FOR DISTRICT ENVIRONMENTAL STAFF

General

General qualifications for District Environmental staff would include a degree in environmental studies, environmental science or a related field, or in urban planning, and at least three years experience in an environmental field. The requirement for an environmental, urban planning, or related degree can be offset by suitable environmental technical experience and completion of all of the "High" priority training classes in the following list. (For staff that has the requisite degree, completion of all of the "High" priority training classes is strongly recommended.)

Environmental Training

Available environmental training classes and recommended priority for each (High, Medium, or Low) include the following:

- IDOT – Phase I Process Overview/Location & Environmental Studies (High)
- IDOT – COSIM Air Quality Modeling (High)
- IDOT – Noise Training by Statewide Noise Consultant – TNM 2.5 Noise Model (High)
- IDOT – Natural Resources Workshop (High)
- IDOT – Water Quality Workshop (High)

- FHWA – Community Impact Assessment (High)
- NHI – NEPA and Transportation Decision Making (High)
- NHI – Public Involvement in the Transportation Decision-making Process (High)
- NHI – Fundamentals of Title VI/Environmental Justice (Medium)
- NHI – Design and Implementation of Erosion and Sediment Control (Medium)
- NHI – The CMAQ Program: Purpose and Practice (Low)
- NHI – Mobile Source Emissions Factor Modeling (Low)

- FHWA Resource Centers – Basic NEPA Project Development and Transportation Decision Making (High)
- FHWA Resource Centers – NEPA, Project Development, and Transportation Decision Making (High)
- FHWA Resource Centers – Section 4(f) Workshop (High)
- FHWA Resource Centers – Highway Traffic Noise Analysis Workshop (High – Districts 1 & 8)
- FHWA Resource Centers – Air Quality Analysis & Workshops (High – Districts 1 & 8)
- FHWA Resource Centers – Endangered Species Act, Section 7 – Federal Consultation (Medium)
- FHWA Resource Centers – Functional Analysis of Wetlands (Medium to Low)
- FHWA Resource Centers – Mobile Source Emission Factor Modeling (Low)
- FHWA Resource Centers – Introduction to Emission Factor and Micro-Scale Dispersion Modeling Course (Low)
- FHWA Resource Centers – Pollution Dispersion Models (Low)
- FHWA Resource Centers – Transportation Air Quality Dispersion Modeling (Low)

- IHPA – Section 106/707 Documentation Workshop